

DEPARTMENT OF THE ARMY  
U.S. Army Military District of Washington  
Washington, DC 20319-5058

MDW Regulation  
No. 385-1

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Safety  
HAZARD COMMUNICATION STANDARD PROGRAM

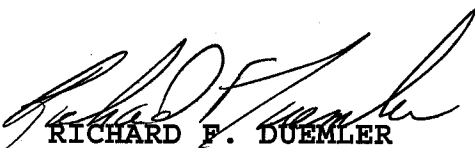
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**History.** This is a new regulation.

**Summary.** This regulation prescribes policy, procedures, and responsibilities for the establishment and implementation of a Hazardous Communication Standard (HCS) Program, as identified by Department of Defense Instruction (DoDI) 6050.5, DoD Hazard Communication Program, within the U.S. Army Military District of Washington (MDW). It further establishes the MDW Safety Director as the MACOM proponent and authority for the HCS Program, and prescribes new MDW Form 35-R-E (Hazardous Chemical Inventory Worksheet) and MDW Form 36-R-E (Request for DoD 6050.5-LR Distribution).

**Applicability.** This regulation applies to staff principals, installations, subordinate commands and activities of MDW. It also applies to tenant activities that are assigned to or supported by MDW.

**Suggested Improvements.** The proponent of this regulation is the MDW Safety Office. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, MDW, ATTN: ANOS, 103 Third Avenue, Fort Lesley J. McNair, DC 20319-5058.

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## Glossary

Explanation of Abbreviations and Special Terms  
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## 1. Purpose

This regulation is established to implement a Hazardous Communication Standard (HCS) Program within MDW. It prescribes policies, procedures, and responsibilities necessary to ensure that all personnel, military and civilian, commanders, supervisors, leaders and employees alike, are equipped with the knowledge to identify and handle hazardous chemicals and waste in the workplace. To equip all personnel, through training and other means, with the knowledge needed to take the appropriate measures to reduce exposures, use less hazardous chemicals, and establish proper and safer work practices. This regulation implements DoDI 6050.5 (DoD Hazard Communication Program) and Executive Order 12856, Emergency Planning and Community Right-to-Know Act (EPCRA).

## 2. References

Required and related publications are listed in appendix A.

## 3. Explanation of abbreviations and terms

Abbreviations and special terms are explained in the glossary.

#### 4. General

a. Prior to exposure, personnel who work with or may be occupationally exposed to hazardous chemicals will be informed, through training, of the hazards, personal protective equipment, and actions necessary to avoid or minimize their exposure.

b. The quantity of hazardous chemicals stocked by any user will not exceed the minimum quantity necessary to satisfy operational requirements. Where less hazardous or nonhazardous chemicals are capable of accomplishing a task, they will be used.

c. New systems, equipment, and operational and maintenance procedures will be designed to minimize the use of hazardous chemicals. Where the use of hazardous chemicals is required, adequate engineering controls, personal protective clothing and equipment (PPC&E), and administrative controls will be used to ensure the health and safety of exposed personnel and to protect the environment.

d. Products containing hazardous chemicals will not be used except as authorized by the Installation Safety Office (ISO) if:

(1) A Material Safety Data Sheet (MSDS) is not on file in the ISO.

(2) Required PPC&E are not available.

e. The written HCS will be available to all employees or their designated representatives upon request.

f. MSDS(s) will be readily accessible to employees during each work shift when they are in their work area.

g. A current hazardous chemical inventory will be maintained for each workplace. This inventory will include the product name, chemical name, Chemical Abstract Service (CAS) number, and maximum quantity on hand at any given time.

h. Training will be provided to personnel who use or may be potentially exposed to hazardous chemicals prior to working with the hazardous chemicals.

i. Laboratories and operations where hazardous chemicals are only handled in sealed containers (i.e., a warehouse) have limited coverage of the HCS rule. (Laboratories must comply with paragraphs (b)(3) and (h) of 29 CFR 1910.1200 and 29 CFR 1910.1450). Laboratories and warehouses must keep labels on containers as they are received, maintain material safety data sheets that are received, provide users of the hazardous chemicals with the MSDS, provide information and training for their employees who handle or transport the containers, and maintain an inventory with the maximum one-time storage amount of all hazardous chemicals and the average storage amount of hazardous chemicals. This inventory will list the product, chemical name, and CAS number of the hazardous chemicals.

j. This regulation does not apply to the following areas:

(1) Hazardous waste (HW) when subject to regulations by the Environmental Protection Agency.

(2) Wood and wood products.

(3) Food, drugs, and cosmetics intended for personal use.

(4) Tobacco products.

(5) Consumer products used/stored in the workplace in the same manner as normal consumer use as defined by the Consumer Product Safety Act and Federal Hazardous Substance Act. This means products where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended. (Contact the Installation Safety Office for clarification if an item is considered as a consumer product under the definition of this subparagraph).

(6) Articles which do not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use.

(7) Ionizing or nonionizing radiation.

## 5. Responsibilities

a. MDW Safety Director will provide policy guidance, coordination and oversight of the HCS Program.

b. MDW Installation Commanders will:

(1) Establish and implement an HCS program. The program will meet the requirements of DoDI 6050.6 and this regulation. Implementation will require the efforts of unit commanders, to include tenant activities, supervisors, and safety, engineering, logistics, and procurement personnel.

(2) Ensure all personnel who have any part in the transportation of hazardous chemicals are trained by certified trainers. This training can be obtained from commercial vendors or the commander can appoint someone to give the training; however, this person must attend certification training prior to training others.

c. Installation Safety Offices (ISO) will:

(1) Function as the overall coordinator of the HCS.

(2) Conduct job hazard analyses and standard Army safety and occupational health inspections (SASOHIs) to identify and monitor workplace hazards.



(3) Ensure that all personnel are informed of their responsibilities and rights under the HCS program.

(4) Provide technical assistance for corrective measures, such as engineering controls and PPC&E.

(5) Assist all directorates, activities, units, and tenants in complying with the procedures and intent of 29 CFR 1910.1200 and this regulation.

(6) Assist in the development and design of engineering and administrative control methods to reduce employee exposure to hazardous chemicals. Ensure supervisors are provided with a copy of the written HCS program, i.e., this regulation.

(7) Assist supervisors in developing and implementing local installation HCS standing operating procedures.

(8) Conduct HCS training or use train-the-trainer methodology to ensure all employees who work with or who may be potentially exposed to hazardous chemicals in the workplace receive "effective" training under HCS as required by 29 CFR 1910.1200 and paragraph 7 of this regulation.

(9) If train-the-trainer methodology is used, oversee trainers to ensure that all employees required to receive training receive HCS training.

(10) Ensure training is properly documented.

(a) Department of Defense (DoD) Federal Agency Hazard Communication Training Program. Training will be documented on DD Form 1556 (Request, Authorization, Agreement, Certification of Training and Reimbursement) and a copy placed in the employee's Official Personnel File. A final copy of the DD 1556 will be provided to the employee for his/her own records.

(b) Workplace Training. Training of employees in the workplace by the supervisor should be documented to ensure that employees are trained upon initial entry into the workplace and whenever a new hazardous chemical is introduced. This training will be conducted in accordance with 29 CFR 1910.1200 and paragraph 7 of this regulation. (The ISO will ensure that this training is being provided to employees during the conduct of the annual SASOHI or other safety workplace evaluations).

(11) Maintain an inventory of all hazardous chemicals used or stored on the installation. The list will be updated at least semiannually (i.e. January and June of each year) and copies provided to the installation fire department (if applicable), environmental office, Emergency Planning and Community Right-to-Know Act (EPCRA) Report Officer (Directorate of Public Works), and supporting preventive medicine activity. (ISOs will validate activity inventories during the conduct of their SASOHI).

(12) Maintain an installation library of Material Safety Data Sheets (MSDSs) or Hazardous Management Information System (HMIS) data for each hazardous chemical used or stored on the installation. The MSDS will be crossed referenced with the hazardous chemical inventory.

(13) Assist organizations, work areas, and personnel in obtaining MSDSs, as necessary.

(14) Coordinate with supporting preventive medicine activity for industrial hygiene support.

(15) Ensure that contract statements of work are written or modified to adequately describe that contractors must provide information through the Contracting Officer Representative (COR) to the ISO regarding any hazardous chemicals their employees will be using, and to which other personnel in the area may be exposed. The ISOs will review the statements of work and provide comments back to the COR.

(16) Provide contractor personnel, at the preconstruction conference, with a list of hazardous chemicals used or stored in the area in which they will be working.

d. Civilian Army Personnel Services - National Capital Region/Civilian Personnel Activity Centers (CPACs). When management has identified in a position description that there are certain physical and environmental factors that may adversely affect a civilian employee's work conditions and these conditions are advertised, the CPACs will schedule a pre-employment physical with the appropriate Occupational Health Clinic prior to the employee's entry on duty. The completed physical examination record will be kept in the employee's medical file.

e. Directorates of Public Works (DPWs) will:

(1) Appoint an EPCRA Report Officer.

(2) Eliminate identified workplace hazards that can be corrected by engineering standards.

(3) Manage the installation spill prevention and cleanup program.

(4) Manage the hazardous waste (HW) program.

(5) Provide and maintain MSDSs or HMIS data on DPW supply system issue items. These include items that are purchased through blanket purchase agreements.

(6) Inform contractors and employees of chemical and other hazards to which they may be exposed.

(7) Maintain copies of the installation hazardous chemical inventory that is provided by the ISO.

f. Installation Environmental Offices will:

(1) Monitor compliance with the requirements for safe storage, transportation, and removal of hazardous wastes.

(2) Ensure all EPCRA reports and documents are completed and archived as required by Executive Order 12856.

(3) Ensure employees are receiving training on chemical pollution, prevention, and disposal. Training will be documented on DD Form 1556 and a copy placed in the employee's Official Personnel File. A final copy of the DD Form 1556 will be provided to the employee for his/her own records. The local environmental office will be contacted to provide this required training to employees.

(4) Provide advice and assistance on actions to be taken to protect the environment and personnel in the event of a spill of a hazardous chemical.

g. Director of Logistics (DOL) and other supply activities (except when providing medical supplies) will:

(1) Provide yearly inventories of the hazardous chemicals they store, use, or release to the EPCRA Reporting Officer. Inventories will list the product, chemical name, and CAS number.

(2) Request purchase orders and procurement work directives comply with the provisions of AR 700-141.

(3) Shipments of hazardous chemicals arriving without an MSDS on file will not be released to the user until the MSDS is available. The procurement office and the ISO will be contacted if one is not on file. MSDSs received from the procurement office should be maintained on file and referenced upon receipt to ensure compliance with FAR 52.223-3.

(4) Ensure that all hazardous chemicals are properly identified as such and labeled upon receipt, during storage and when issued.

(5) Provide MSDS or HMIS data when issuing hazardous chemicals to customers.

(6) Maintain MSDS or HMIS data on supply items stored and issued.

h. Procurement offices will:

(1) Ensure all procurement actions comply with the requirements of AR 700-141.

(2) Require ordering activities to submit the latest MSDS or HMIS data with purchase order documents for locally procured hazardous chemicals. (This procedure readily identifies items as being hazardous chemical orders).

(3) Ensure all contracts/orders and purchase agreements for hazardous chemicals specify an MSDS must be forwarded to the procurement office by inclusion of FAR 52.223-3. The MSDS should be received five days prior to shipment.

(4) Enforce contract/order provisions concerning receipt of hazardous chemicals without an MSDS.

(5) Forward one copy of the solicitation and contract, in addition to the MSDS, to the ISO, and supporting preventive medicine activity. One copy of the MSDS will also be forwarded to DOL or appropriate supply point and ordering activity.

(6) Ensure all blanket purchase agreements under which calls may be placed for hazardous chemicals contain the requirement for the MSDS to be invoked when applicable.

(7) Ensure specifications and statements of work include reference to potential hazardous chemicals which may be encountered during the performance of contracts.

(8) Ensure that government hazardous chemicals policy is explained to all contractors at pre-award conferences and documented in the minutes.

i. Preventive Medicine Activities will:

(1) Conduct industrial hygiene surveys for identification and evaluation of potentially hazardous chemicals as part of the workplace evaluation in accordance with (IAW) AR 40-5. Forward copy of written report to the ISO. (The Health Hazard Inventory Module may also be used as a method of identifying employees who work with or may be potentially exposed to hazardous chemicals).

(2) Provide technical guidance, such as advice on PPC&E and training of personnel.

(3) Notify the ISO of any hazardous chemicals found that are not listed on the inventory for that organization.

(4) Provide medical surveillance IAW AR 40-5 for workers potentially exposed to certain hazardous chemicals.

j. Contracting Officer Representatives (COR) will ensure:

(1) Contractors are briefed on chemical hazards in the area where they will be working.

(2) Soldiers and civilian employees are aware of hazardous chemicals introduced by the contractor during contract performance.

(3) Contract statements of work are written or modified to adequately describe that contractors must provide information through the COR to the ISO regarding any hazardous chemicals their employees will be using, and to which other personnel in the area may be exposed.

(4) The policies set forth in this regulation and the contract are understood and adhered to by the contractor.

k. Supervisors will:

(1) Ensure that a safe and healthful work environment is provided for all employees.

(2) Maintain an up-to-date inventory of hazardous chemicals in the workplace. Ensure an updated inventory of hazardous chemicals is forwarded to the ISO on MDW Form 35-R-E (Hazardous Chemical Inventory Worksheet) semi-annually (i.e., no later than 5 January and 5 June of each year). A blank copy of MDW Form 35-R-E is at the end of this regulation. It may be reproduced on 8-1/2 by 11-inch paper and electronically generated. The instructions on how to properly complete MDW Form 35-R-E are included as the second page of MDW Form 35-R-E, which is located at the end of this regulation.

(3) Maintain a current file of MSDSs or HMIS data for each hazardous chemical used in the workplace. Ensure copies of MSDSs for new chemicals are forwarded to the ISO. Contact the ISO if an MSDS is not available.

(4) Ensure products received or issued are accompanied by an MSDS. If no MSDS is present or HMIS data cannot be obtained for a particular hazardous chemical, the product will not be used until the MSDS or HMIS data can be obtained.

(5) Ensure a copy of all new MSDSs are sent to the ISO and supporting preventive medicine activity.

(6) Ensure all potential safer chemicals have been assessed prior to sending purchase request to procurement. (A substitution of a nonhazardous chemical should always be used/ordered versus a hazardous chemical). When ordering a product that contains a hazardous chemical, supervisors will annotate on the purchase request that the order contains a hazardous chemical to alert the procurement office that a MSDS will be required with shipment of the product.

(7) Ensure hazardous substances are properly labeled.

(8) Ensure all workplace hazards involving hazardous chemicals are corrected as soon as they are identified.

(9) Ensure position job descriptions are accurate and reflect general work exposures/hazards (i.e., chemicals, noise, etc.).

(10) Identify personnel who work with or who may be exposed to hazardous chemicals by conducting a safety job hazard analysis for each employee. Ensure employees are informed of the hazardous chemicals that they may encounter, the safety hazards present, and protective measures.

(11) Ensure employees receive HCS and HW (hazardous waste) training, the training is properly documented on DD Form 1556, and a copy of DD Form 1556 has been placed into their Official Personnel File.

(12) Ensure employees receive additional training on specific hazardous chemicals located in their workplace upon initial assignment to the workplace and whenever a new hazardous chemical is introduced. Training will be conducted IAW paragraph 7 of this regulation. This training will include, but not be limited to:

(a) Safe handling of the hazardous chemicals in the workplace.

(b) Methods and observations that may be used to detect the presence or release of hazardous chemicals.

(c) The physical and health hazards of the specific hazardous chemicals in the workplace.

(d) The measures employees can take to protect themselves from hazards, including appropriate work practices, emergency procedures, and PPC&E to be used.

(e) Location of MSDSs and written HCS program.

(f) Methods to use, dispose, and clean-up hazardous chemicals and wastes that minimizes the impact on the environment and complies with all requirements listed under 40 CFR 264 (d)(3).

(g) Transportation of hazardous chemicals/wastes to include specific transportation requirements such as manifesting/bill of lading preparation, marking of containers and vehicles, proper shipping container, packing, and loading.

(13) Ensure personnel who work with or who may be potentially exposed to hazardous chemicals receive baseline and/or annual medical examinations, when necessary, and as required by AR 40-5.

(14) Prepare an HCS Standing Operating Procedure (SOP) which identifies the use of a hazardous chemical, safe handling procedures, emergency procedures, and PPC&E to be used. (See appendix B for example of SOP).

(15) Forward a copy of the HCS SOP to the ISO for review and approval.

(16) Ensure employees are provided with and use prescribed PPC&E.

(17) Ensure HMIS data or MSDSs concerning chemicals in the workplace are available to employees during each work shift.

1. Employees who work with or who may be potentially exposed to hazardous chemicals in the workplace will:

(1) Attend MDW approved HCS and HW training IAW paragraph 7 of this regulation.

(2) Receive a baseline and annual medical examination, when necessary, and as required by AR 40-5.

(3) Review MSDSs and local HCS SOP, and become familiar with the hazards associated with the chemicals they are handling or exposed to, and emergency procedures.

(4) Check labels on incoming containers for information about the hazardous chemical and handle them accordingly.

(5) Use prescribed PPC&E as required.

(6) Report all workplace hazards and any violations of the HCS SOP or current policy to supervisors.

**6. Training** (See appendix G for Training Plan)

a. All personnel who work with or who are potentially exposed to hazardous chemicals in the workplace will be provided with information and receive training on the existence, use, storage, and disposal of the hazardous chemicals in their workplace. Training is required at the time of the employee's initial job assignment and whenever a new chemical is introduced into the workplace. In addition, within six months of the employee assuming the duties of handling hazardous waste, hazardous waste training will be provided and reviewed annually.

b. The DoD 6050.5-G-1, Federal Hazard Communication Training Program Trainer's Guide will be used as the minimum training for all DoD personnel who handle or use hazardous materials. The development or purchase of other basic hazard communication training programs is not authorized.

**7. Labeling**

a. Hazardous warning markings and labels are necessary to clearly show the hazardous nature of the contents during all stages of the life cycle of a hazardous chemical, i.e., storage, handling, use, and disposal. When packages or containers of hazardous chemicals are removed from a labeled container for use or further distribution, the continuity of information will be preserved.

b. All labels will be legible and in English, and identify the hazardous chemical(s) contained within, the manufacturer's name and address, and appropriate hazard warnings, or alternately, words, pictures, symbols, or a combination thereof. (Hazard warning information in other languages may supplement the English version of the label where appropriate).

c. All labels will be prominently displayed or readily available in the work area and throughout the workshift. The use of signs, placards, process sheets, batch tickets, operating procedures, or other such written materials may be used in lieu of affixing labels to individual stationary process containers, as long as the alternate method identifies the containers to which it is applicable and conveys the required information on a label.

d. Items received with commercial labels that meet the HCS requirements will not be relabeled.

e. No warning information, whether provided by the manufacturer or locally produced, will be defaced or removed from a container of hazardous chemicals. If the original warning information is found to be incorrect or inadequate, the manufacturer will be notified. A corrected or updated MSDS will be required and will be requested from the manufacturer. The supervisor will add the corrected information to the label before it is used in the workplace again. (Note: Manufacturers, importers, distributors, and employers who become aware of new information regarding hazardous chemicals are required to post the new information within three months).

f. Where an employee's work requires that a small amount of a hazardous chemical be used, labeling is not required when the following conditions are met:

(1) The hazardous chemical is used only by the employee who obtained it from the original container.

(2) The amount of hazardous chemical in the unlabeled container does not exceed what is required for the work shift.

(3) The employee using the hazardous chemical is able to maintain control and security of the container while it contains the unlabeled hazardous chemical.

g. Where the labeling of every container is either impractical or inappropriate, alternative means of labeling may be used. These methods must provide the same information contained on a label. An example would be toxic welding fumes. Alternative forms of labeling include:

(1) Placarding.

(2) Batch processing papers.

(3) Shipping papers.

(4) Other forms approved by the ISO.

h. Three situations are exempt from, or allowed alternatives to, the labeling requirements:

(1) In laboratories, labels on incoming containers of hazardous chemicals will not be removed or defaced, and



containers such as test tubes or flask beakers, in use, need not be labeled with an identified and hazard warning as defined by the Health Services Command.

(2) Individual stationary process containers where the required information is conveyed by an alternative methods, such as signs, placards, and other written forms of warnings. The alternative methods of labeling must be approved by the ISO.

(3) Portable containers of hazardous chemicals which are intended only for the immediate use of employees who have transferred the chemical from a labeled container.

i. Labeling requirements do not apply to the following substances as long as they are subject to handling requirements of other federal agencies:

(1) Pesticides.

(2) Food, food additives, drugs, and cosmetics.

(3) Alcoholic beverages.

(4) Household consumer products governed by the Consumer Product Safety Commission.

j. Piping containing hazardous chemicals do not require labeling, however, employees must be informed of the contents and the associated hazards and protective measures.

k. All empty containers will be identified until thoroughly decontaminated or until properly disposed of. Warning labels will be removed from decontaminated containers before being released for other uses.

l. Under the Hazardous Materials Transportation Act, container labeling must not conflict with the regulations issued by the Department of Transportation (DOT). If the hazardous chemical is regulated by the Occupational Safety and Health Act (OSHA), the labels must comply with those regulations. See appendix C for DOT hazardous materials warning labels and placards.

m. The DD Form 2521 (Hazard Chemical Warning Label - 8-1/2 x 11) or DD Form 2522 (Hazard Chemical Warning Label - 4 x 6) or equivalent will be used:

(1) When hazardous chemicals are received unlabeled and an MSDS is available.

(2) When repackaging a hazardous chemical from a labeled container.

(3) To mark a tank, vat or similar vessel containing a hazardous chemical in lieu of placards, stencils, or other methods.

(4) The national stock number (NSN) for DD Form 2521 is 7690-01-342-48850; the NSN for DD Form 2522 is 7690-02-342-4849. These forms are the same except for their size, DD Form 2521 is 8-1/2 x 11 and DD Form 2522 is 4 x 6. These forms may be typed or handwritten with pen, pencil, or marker. An example of DD Form 2521 is at appendix D.

n. When hazardous chemicals are shipped on or off the installation, DOT guidelines will be adhered to. The specific information is obtained by cross referencing the national item identification number (NIIN) with DoD 6050.5-L.

**8. Material Safety Data Sheets (MSDS).** The MSDS provides detailed information on each hazardous chemical, including its potential hazardous effects, its physical and chemical characteristics, and recommendations for appropriate protective measures.

a. The supervisor will maintain in the workplace, copies of all required MSDSs for each hazardous chemical, and will ensure that they are readily accessible during each work shift to employees when they are in their work area(s).

b. Each MSDS will be in English (although the supervisor may maintain copies in other languages as long as the MSDS is originally in English).

c. The contents of any MSDS will meet or exceed the data requirements of OSHA Form 174 (Material Safety Data Sheet). All elements of the MSDS will be completed with no blank spaces - if no relevant information is found for any given category on the MSDS, the chemical manufacturer, importer, or preparer of the MSDS must indicate that no applicable information was found. An explanation of all the MSDS components is at appendix E, and an example MSDS (OSHA Form 174) is at appendix F.

d. An MSDS will be maintained for each substance listed on the hazardous chemical inventory. The MSDS will be the most current one supplied by the chemical manufacturer, importer, or distributor.

e. No hazardous chemical will be used in the workplace until the applicable MSDS has been obtained and is on file in the work area.

f. Electronic access, microfiche, and other alternatives to maintaining paper copies of the MSDS are permitted as long as no barriers to immediate employee access in each workplace are created by such options. The DoD Hazardous Materials Information System (HMIS) and the Hazardous Item Listing (DoD 6050.5-L), which are on CD-ROM, meet all the requirements of OSHA Form 174. Organizations can order the DoD 6050.5-L, HMIS, through their Unit Publications Control Officer.

g. Materials safety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a workplace where it may be more appropriate to address the hazards of a process rather than an individual hazardous chemical. However, the supervisor will ensure that in all cases, the required information is provided for each hazardous chemical and is readily accessible during each work shift to employees when they are in their work area(s).

h. Where employees must travel between workplaces during a workshift, the MSDS may be kept at the primary workplace. However, the supervisor will ensure that employees can immediately obtain the required information in an emergency.

i. The MSDS for locally purchased items and nonstandard stock hazardous chemicals will be acquired according to the procedures outlined in AR 700-141.

j. When the MSDS has not been received, either by shipment or through local purchase, the supervisor will contact the procurement official who will followup with the supplier to obtain an MSDS according to the procedures outlined in AR 700-141.

k. Identification of a hazardous chemical and correct matching to its MSDS is required. Critical differences can exist between similarly named chemicals and products. Questions will be resolved through consultations with the local ISO.

l. The ISO will maintain a master file of all MSDSs used by all installation activities, to include tenant activities.

m. The ISO will provide an explanation and copies of MSDSs to all personnel upon request.

n. Supervisors will prepare SOPs which identify the use, safe handling procedures, emergency measures, and PPC&E employees must use.

## **9. Inventory**

a. A written hazardous chemical inventory (MDW Form 35-R-E) will be prepared and maintained in the office by the supervisor and updated on receipt of new and/or depletion of hazardous chemicals.

b. The inventory may be maintained on hard copy, electronic media, or microfiche. The inventory must either be completed on MDW Form 35-R-E, which is at the end of this regulation or the form may be electronically generated.

c. A current copy of the inventory must be submitted to the ISO semiannually - on 5 January and 5 June of each year.

d. The inventory will cross-reference the user's MSDS file and/or HMIS.

**10. Emergency Planning and Community Right-to-Know Act (EPCRA) Reports.**

a. Section 302, Community Emergency Planning. Notify the State Emergency Response Commission (SERC) and the Local Emergency Planning Commission (LEPC) within 60 days of producing, using or storing an extremely hazardous substance (EHS) in excess of the threshold planning quantity (TPQ). Notification is to be by letter listing the name of the chemical exceeding the TPQ and the name of the facility point of contact.

b. Section 304, Release Notification. For all releases above the reporting quantity of EHS or CERCLA 102(a) (Comprehensive Environmental Response, Compensation, and Liability Act) listed chemicals that leave the facility boundaries, an immediate and written report must be made to the LEPC and SERC and include:

- (1) Chemical name.
- (2) If the substance is an EHS.
- (3) An estimate of the quantity released.
- (4) The time and duration of the release.
- (5) The media of the release (air, water, or land).
- (6) The known acute or chronic health risks and advice regarding medical attention if necessary.
- (7) Precautions such as evacuation or shelter place.
- (8) Name and number for the point of contact. This should be the Public Affairs Office. Written follow-up notification must be made as soon as practicable to include an updated initial release, information on actual response taken, and procedures implemented to prevent further releases.

c. Section 311, Community Right-to-Know. Within three months of having a hazardous chemical in amounts greater than 10,000 pounds or greater than the chemical's threshold planning quantity of an EHS greater than 500 pounds, the list of MSDS materials of the actual chemical MSDS must be submitted to the LEPC, SERC, and local fire departments.

d. Section 312, Community Right-to-Know Inventories.

(1) By 1 February of each year, all individuals who use or store chemicals requiring an MSDS must report the average and maximum one-time quantities of the hazardous chemicals stored to the EPCRA Reporting Officer.

(2) By 1 March of each year, the EPCRA Reporting Officer must submit a Tier I or Tier II report to the LEPC, SERC, and local fire department of all hazardous chemicals stored or used in quantities greater than 10,000 pounds or 500 pounds for EHS.

e. Section 313, Toxic Chemical Release Reporting.

(1) By 1 April of each year, individuals who use, manufacture, or produce EPCRA Section 313 listed chemicals, must report the amount of these chemicals to the EPCRA Reporting Officer.

(2) By 15 July of each year, the EPCRA Reporting Officer must complete an EPCRA Section 313 TRI Report for each chemical that exceeds reporting thresholds for the facility. The facility report must include all tenant operations.

**11. Trade Secrets**

a. Protection of trade secret information is required. Data contained in the limited release (LR) edition of the HMIS (DoD 6050.5-LR) will be treated in the same manner as for "official use only" information. Lawful restrictions on the use of information provided directly by manufacturers or suppliers must be honored. Penalties may be applicable in case of unauthorized release. (Note: Distribution of the -LR version is restricted. Only emergency response, environmental, health, and safety functional personnel require access to this data. These activities requiring the -LR version, must submit a request for approval (MDW FM 36-R-E, Request for DOD 6050.5 - LR Distribution) to Commander, U.S. Army Military District of Washington, Deputy Chief of Staff for Logistics, ATTN: ANLG-LS, 103 Third Ave, Fort Lesley J. McNair, DC 20319-5058). A blank copy of this MDW Form is at the end of this regulation. It may be reproduced on 8-1/2 by 11-inch paper and electronically generated. The form is self-explanatory.

b. Immediate trade secret disclosure will be made available only to the health professional who treats an employee in an emergency or first-aid situation. This information is available from the manufacturer or may be available from the ISO.

c. Anyone who obtains trade secret information in an emergency or first-aid situation may be required to sign a written statement of need and confidentiality agreement. The demand that the statement be signed cannot be used as a prior condition of disclosure; however, it may be required as soon as circumstances permit.

d. Anyone requesting trade secret information in non-emergency situations must submit the request in writing to the manufacturer. The written request must contain the specific occupational health needs necessitating the disclosure.

**Appendix A  
References****Section I  
Required Publications**

DoD 6050.5	DoD Hazard Communication Program
DoD 6050.5-G	Hazardous Materials Information System Users Guide
DoD 6050.5-G-1	Federal Hazard Communication Training Program Trainer's Guide
DoD 6050.5-H	Hazardous Chemical Warning Labeling System
DoD 6050.5-L	DoD Hazardous Materials Information System: Hazardous Item Listing
AR 700-141	Hazardous Material Information System (HMIS)
TVT 20-827	Federal Hazard Communication Standards Training Program

**Section II  
Related Publications**

Executive Order 12196	Occupational Safety and Health Programs for Federal Employees, 26 Feb 90
Executive Order 12856	Emergency Planning and Community Right-to-Know Act (EPCRA), 1986
29 CFR 1910.1200	Hazard Communication
29 CFR 1910.1450	Occupational Exposure to Hazardous Chemicals in Laboratories
40 CFR 264.16	Hazardous Waste - Personnel Training
49 CFR 172	Transportation of Hazardous Materials/Waste
DoD 6050.5-W	Federal Hazard Communication Training Program (Student's Workbook)
AR 40-5	Preventive Medicine
AR 200-1	Environmental Protection and Enhancement
AR 385-10	Army Safety Program
FAR 52.223-3	Federal Acquisition Regulation (Hazardous Material Identification and Material Safety Data)

**Appendix B**  
**Example of Hazard Communication Program SOP**

HAZARD COMMUNICATION PROGRAM SOP

1. In order to comply with the Occupational Health and Safety Standard, 1910.1200, Hazard Communication, the following Hazard Communication Program Plan is established for \_\_\_\_\_.

All divisions and sections of \_\_\_\_\_ (Name of Activity) are included in

this program. The written program, MDW Reg 385-1, along with this SOP will be available in the \_\_\_\_\_ (Location) for review during each work shift.

2. The \_\_\_\_\_ (Name of Activity) will meet the requirements of this rule as follows:

a. Container labeling. The \_\_\_\_\_ (Person/Position) will verify that all containers received for use will:

(1) Be clearly labeled as to the contents.

(2) Note the appropriate hazard warning.

(3) List the name and address of the manufacturer/importer/or responsible party.

b. It is the policy of \_\_\_\_\_ (Name of Activity) that no container will be released for use until the above data is verified.

3. Material Safety Data Sheets (MSDS). The \_\_\_\_\_ (Person/Position) is responsible for obtaining and maintaining all MSDSs. Copies of MSDSs for all hazardous chemicals to which employees of this activity may be exposed will be kept in \_\_\_\_\_.

\_\_\_\_\_ (Location)  
MSDSs will be available to all employees in their work area for review during each work shift. If MSDSs are not available or new chemicals in use do not have MSDS, \_\_\_\_\_ (Person/Position) will be immediately notified.

4. Employee Training and Information. Prior to starting work, each new employee of \_\_\_\_\_ (Name of Activity) will attend a health and safety orientation, (DoD Federal Agency Hazard Communication Training Program) and will receive hazardous chemical workplace training that will be provided by \_\_\_\_\_ (Person/Position) on the following:

a. Hazardous Chemical Workplace Training.

(1) An explanation of the types of operations and hazardous chemicals used in the employee's workplace.

(2) A description of the command/installation hazard communication program, the location and availability of the program, and how personnel can use and obtain chemical hazard information.

(3) Methods used by management to recognize and evaluate workplace chemical exposures.

(4) Location of chemical inventory, material safety data sheets, and the name and location of the program manager.

(5) An explanation of the physical and health hazards associated with potential exposure to workplace chemicals.

(6) Hazardous chemical properties including visual appearance, odor, and methods that can be used to detect the presence or release of hazardous chemicals.

(7) Protective measures including administrative and engineering controls, safe work practice guidelines, emergency procedures, and protective clothing and equipment.

(8) Hazardous chemical spill prevention and leak procedures, emergency procedures, and notification procedures.

(9) The meaning of workplace hazardous chemical warning labels, an explanation of the MSDS and SOPs to ensure that chemicals are handled, stored, and disposed of in accordance with specified SOPs and regulations.

b. Hazardous Waste (HW) Training.

(1) An explanation of the types of operations to which they are assigned that generate hazardous waste.

(2) A description of the procedures required by 40 CFR 264.16 (d)(3) to properly dispose of the hazardous generated to include storage, labeling, and manifest requirements.

(3) At the minimum, the training will be 40 hours and meet the requirements listed in 29 CFR 120.76, Hazardous Waste Operators (HAZWOPER).

(4) Supervisors of hazardous waste operators will receive, at the minimum, a 24 hour training program to meet the requirements listed in 29 CFR 120.76, HAZWOPER.

(5) A basic 8-hour training course will be provided to managers and persons who work around hazardous waste but are not responsible for the day-to-day activities of managing/handling the hazardous waste and chemicals.



c. Hazardous Chemical/Waste Transportation. This training will be provided to employees who have any part in the transportation of hazardous chemicals by certified trainers.

d. Each employee will receive a copy of the DD Form 1556 (Request, Authorization, Agreement, Certification of Training and Reimbursement) for the DoD Federal Agency Hazard Communication Program Training. After attending the workplace hazardous chemical training, each employee will sign a form to verify that s/he attended the training and understands the Hazard Communication Standard Program.

5. List of Hazardous Chemicals. The following is a list of all known hazardous chemicals used by employees of \_\_\_\_\_.  
(Name of Activity)  
Further information on each noted chemical can be obtained by reviewing Material Safety Data Sheets located \_\_\_\_\_.  
(Location)

(LIST HAZARDOUS CHEMICALS here or ATTACH A COPY OF THE HAZARDOUS MATERIAL INVENTORY LIST).

6. Hazardous Nonroutine Tasks. Periodically, employees are required to perform hazardous nonroutine tasks. Prior to starting work on such projects, each affected employee will be given information from their supervisor about hazardous chemicals to which they may be exposed during such activity. This information will include:

- a. Specific chemical hazards.
- b. Protective/safety measures the employee can take.
- c. Measures the employer has taken to lessen the hazards including ventilation, respirators, presence of another employee, and emergency procedures. Examples of nonroutine tasks performed by employees of this activity are:

(List Tasks and Hazardous Chemicals here)

7. Chemicals in Unlabeled Pipes. Work activities are often performed by employee in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employee shall contact \_\_\_\_\_,

(Person)

(Position)

for information regarding:

- a. The chemical in the pipes.
- b. Potential hazards.
- c. Safety precautions which should be taken.

8. Informing Contractors. It is the responsibility of  
(Person/Position/Activity) to provide contractors with employees  
the following information:






















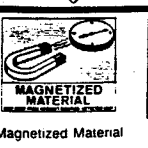
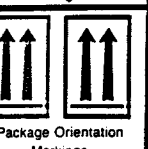
a. Hazardous chemicals to which they may be exposed while on  
the job site.

b. Precautions the employees may take to lessen the  
possibility of exposure by usage of appropriate protective  
measures.

(Signature block)

## Appendix C

# Hazardous Materials Warning Labels

DOMESTIC LABELING							
							
							
							
					Handling Labels		

## General Guidelines on Use of Labels

- Labels illustrated above are normally for *domestic shipments*. However, some air carriers may require the use of International Civil Aviation Organization (ICAO) labels.
- Domestic Warning Labels may display UN Class Number, Division Number (and Compatibility Group for Explosives only.) Sec. 172.407(g).
- Any person who offers a hazardous material for transportation **MUST** label the package, if required. [Sec. 172.400(a)].
- Label(s), when required, must be printed on or affixed to the surface of the package near the proper shipping name. [Sec. 172.406(a)].
- When two or more different labels are required, display them next to each other. [Sec. 172.406(c)].
- Labels may be affixed to packages (even when not required by regulations) provided each label represents a hazard of the material in the package. [Sec. 172.401].
- The Hazardous Materials Tables, Sec. 172.101 and 172.102, identify the proper label(s) for the hazardous materials listed.

## UN Class Numbers

Hazardous materials class numbers associated with the hazard classes.

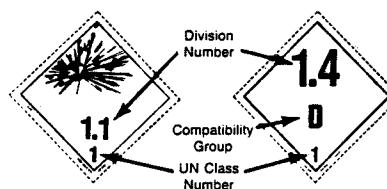
- Class 1—Explosives
- Class 2—Gases (Compressed, Liquefied or dissolved under pressure)
- Class 3—Flammable liquids
- Class 4—Flammable solids or Substances
- Class 5—Oxidizing Substances
- Class 6—Poisonous and infectious Substances
- Class 7—Radioactive Substances
- Class 8—Corrosives
- Class 9—Miscellaneous dangerous Substances

## INTERNATIONAL LABELING



### EXAMPLES OF INTERNATIONAL LABELS

- These are examples of International Labels not presently used for domestic shipments.
- Text, when used Internationally may be in the language of the country of origin.
- Most of the domestic labels (illustrated above) may be used Internationally.
- Text is *mandatory* on Radioactive Material, St. Andrews Cross, \* and Infectious Substance labels.



### EXAMPLES OF EXPLOSIVE LABELS

- The NUMERICAL DESIGNATION represents the CLASS or DIVISION.
- ALPHABETICAL DESIGNATION represents the COMPATIBILITY GROUP (for Explosives Only).
- DIVISION NUMBERS and COMPATIBILITY GROUP combinations can result in over 30 different "Explosives" labels (see IMDG Code/ICAO).

For complete details, refer to one or more of the following:

- Code of Federal Regulations, Title 49, Transportation, Parts 100-199. [All Modes]
- International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by air. [Air]
- International Maritime Organization (IMO) Dangerous Goods Code. [Water]
- Canadian Transport Commission (CTC) Regulations. [Rail]



U.S. Department of Transportation  
**Research and Special Programs  
 Administration**




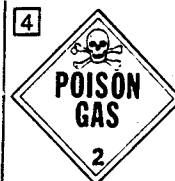

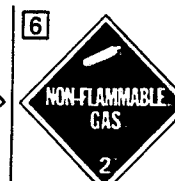
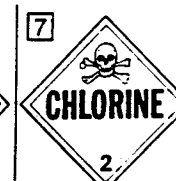




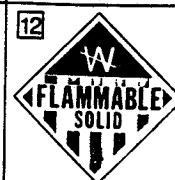
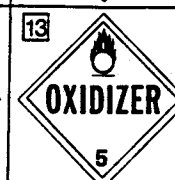
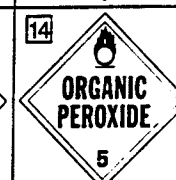




Materials Transportation Bureau  
 Washington, D.C. 20590

CHART 8  
 JANUARY 1985

# Hazardous Materials Warning Placards

**DOMESTIC PLACARDING**

Illustration numbers in each square (1 through 18) refer to TABLES 1 and 2 below.

 1	 1	 1	 2	 2*	 2	 2
 2	 3*	 3*	 3	 3	 5	 5
 6	 7	 8	 	<b>HIGHWAY</b> <ul style="list-style-type: none"> <li>For "HIGHWAY ROUTE CONTROLLED QUANTITY" OF RADIOACTIVE MATERIALS [Sec. 172.507].</li> <li>For use of the words "GASOLINE" and "FUEL OIL" on placards [Sec. 172.542(c) or 172.544(c)].</li> </ul> <b>RAIL</b> <ul style="list-style-type: none"> <li>For use of EXPLOSIVE A, POISON GAS AND POISON GAS-EMPTY placards. [Sec. 172.510(a)].</li> </ul>		

**TABLE 1**

HAZARD CLASSES	*NO.
Class A explosives	1
Class B explosives	2
Poison A	4
Flammable solid (DANGEROUS WHEN WET label only)	12
Radioactive material (YELLOW III label)	16
Radioactive material:	
Uranium hexafluoride fissile (containing more than 1.0% U <sup>235</sup> )	16 & 17
Uranium hexafluoride, low-specific activity (containing 1.0% or less U <sup>235</sup> )	16 & 17

NOTE: For details on the use of Tables 1 and 2, see Sec. 172.504 (See footnotes at bottom of tables.)

**Guidelines**

- Placard motor vehicles, freight containers, and rail cars containing *any quantity* of hazardous materials listed in TABLE 1.
- Placard *motor vehicles* and *freight containers* containing 1,000 pounds or more gross weight of hazardous materials classes listed in TABLE 2.
- Placard *freight containers* 640 cubic feet or more containing *any quantity* of hazardous material classes listed in TABLES 1 and/or 2 when offered for transportation by *air or water*. Under 640 cubic feet, see Sec. 172.512(b).
- Placard *rail cars* containing *any quantity* of hazardous materials classes listed in TABLE 2 except when less than 1,000 pounds gross weight of hazardous materials are transported in *Trailers or Containers* on Flat Car Service.

**TABLE 2**

HAZARD CLASSES	*NO.
Class C explosives	18
Blasting agent	3
Nonflammable gas	6
Nonflammable gas (Chlorine)	7
Nonflammable gas (Fluorine)	15
Nonflammable gas (Oxygen, cryogenic liquid)	8
Flammable gas	5
Combustible liquid	10
Flammable liquid	9
Flammable solid	11
Oxidizer	13
Organic peroxide	14
Poison B	15
Corrosive material	17
Irritating material	18

## INTERNATIONAL PLACARDING

- Most international placards are identical (color and pictorial symbols) to the Domestic placards illustrated above.
- International placards are enlarged ICAO or IMO labels (See International Labeling—Otherside).
- Placard **MUST** correspond to *hazard class* of material.

- Placard **ANY QUANTITY** of hazardous materials when loaded in **FREIGHT CONTAINERS, PORTABLE TANKS, RAIL CARS** and **HIGHWAY VEHICLES**.
- International placards may be used in addition to DOT placards for international shipments.

When required, *Subsidiary Risk placards* must be displayed in the same manner as *Primary Risk placards*. Class numbers are *not shown* on Subsidiary Risk placards.

- COMPATIBILITY GROUP DESIGNATORS *must* be displayed on EXPLOSIVES PLACARDS.
- UN CLASS NUMBERS and DIVISION NUMBERS **MUST** be displayed on hazard class placards when required.

## UN and NA Identification Numbers

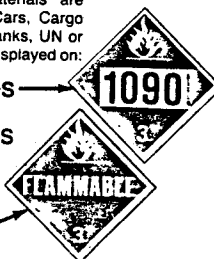
- The *four digit* UN or NA numbers *must* be displayed on *all hazardous materials packages*.
- UN (United Nations) or NA (North American) numbers are found in the Hazardous Materials Tables, Sec. 172.101 and the Optional Hazardous Materials Tables, Sec. 172.102 (CFR, Title 49, Parts 100-199).
- UN numbers are displayed in the same manner for both Domestic and International shipments.
- NA numbers are used only in the USA and Canada.

When hazardous materials are transported in Tank Cars, Cargo Tanks and Portable Tanks, UN or NA numbers *must* be displayed on:

PLACARDS  
OR  
ORANGE PANELS

1090

Appropriate Placard must be used.



### EUROPEAN NUMBERING SYSTEM—

**Top Number**—Hazard Index (Identification of Danger, 2 or 3 figures) Example: 33 = highly inflammable liquid.

33  
1088

**Bottom Number**—UN Number of substance  
Example: 1088 ACETAL

For more complete details on identification numbers see Sec. 172.300 through 172.338.





## Appendix D

## HAZARDOUS CHEMICAL WARNING LABEL

1. CHEMICAL / COMMON NAME 9637, Alkanex	2. HAZARD CODE
--	----------------

3. NSN / LSN 5970-00-161-7232	4. PART NUMBER 9637 Alkanex
----------------------------------	--------------------------------

5. ITEM NAME  
Insulating Varnish

6. HAZARDS (X all that apply)	(1) Acute (Immediate)				(2) Chronic (Delayed)
	NONE	SLIGHT	MODERATE	SEVERE	
a. HEALTH 			X		X
b. CONTACT 				X	
c. FIRE 				X	
d. REACTIVITY 		X			

7. SPECIFIC HAZARDS AND PRECAUTIONS (Including Target Organ Effects)

**WARNING!**

Acute: Irritation of skin, eyes, mucous membranes. Drying, defatting of skin. Ingestion may cause severe damage to gastrointestinal tract. Avoid breathing vapors. Keep away from heat, sparks, and flame.

Chronic: Contains a suspected mutagen. Contains a suspected teratogen. Blood and reproductive disorders may occur; eye, liver, kidney, and central nervous system damage may occur.

(See MSDS for further information)

8. PROTECT (X all that apply)	X	a. EYES	X	b. SKIN	X	c. RESPIRATORY
-------------------------------	---	---------	---	---------	---	----------------

9. CONTACT, a. COMPANY NAME  
ABC Chemical Company

b. ADDRESS (Street, P.O. Box, City, State, Zip Code, and Country)  
10 Elm Street, Anytown, NY 55515

c. EMERGENCY TELEPHONE NUMBER (Include Area Code)  
(555) 810-1010

10. PROCUREMENT YEAR FOR HAZARDOUS CHEMICAL

## Appendix E

## Material Safety Data Sheet Components

## IDENTITY (As Used on Label and List)

NOTE: Blank spaces are not permitted. If any area is not applicable or no information is available, the space must be marked to indicate that.

## Section I

Manufacturer's name, address

Emergency Telephone: Manufacturer's emergency contact number

Information Telephone: Phone number for general information

Date Prepared: Date published or date of last revision

Signature of Preparer: Optional identification of preparer

## Section II - Hazardous Ingredients / Identity Information

Hazardous Components: This section provides information on the hazardous components of this manufacturer's product. The chemical name, the common name, exposure limits, and percentage of composition are listed here.

The exposure limits represent the permissible exposure concentrations of the hazardous components to which it is believed that nearly all workers may be repeatedly exposed, day after day, without significant adverse effects. Because of the wide variation in individuals, however, a small percentage of workers may experience discomfort from, or an inability to work with, some substances at concentrations at or below the listed exposure limits.

Exposure limits are established by various organizations including OSHA (OSHA PEL-Permissible Exposure limits); American Conference of Governmental Industrial Hygienists (ACGIH TLV-Threshold Limit Values); and occasionally by corporations who establish their own limits based on their best available information.

# SAMPLE

## Section III - Physical / Chemical Characteristics

Boiling Point: Temperature at which liquid changes to a vapor.

Vapor Pressure: Pressure exerted by saturated vapor above its own liquid in a closed container.

Vapor Density: Weight of a vapor or gas compared to the weight of an equal volume of air.

Solubility in Water: The % of a material that will dissolve in water, usually at ambient temperature.

Appearance and Odor: Color, physical state at room temperature, size of particles, consistency and odor as compared to common substances.

Specific Gravity: Ratio - volume weight of material to equal volume weight of water, usually at 60°F, unless specified otherwise.

Melting Point: Temperature at which a solid substance begins to change to a liquid state.

Evaporation Rate: Rate at which the chemical will volatilize, as compared to the solvent butyl acetate.

## Section IV - Fire and Explosion Hazard Data

Flash Point: Minimum temperature (either °C or °F) at which a liquid or volatile solid gives off sufficient flammable vapors to form, in combination with air, an ignitable mixture. The test method used to determine the flash point is listed.

Flammable Limits: This indicates the range of gas or vapor concentrations in the air that may ignite or explode if an ignition source is present.

Extinguishing Media: Appropriate extinguishing agent(s) for this particular material is given.

Special Fire-Fighting Procedures: Appropriate equipment and methods for hazards encountered in fire situations are listed here.

Unusual Fire and Explosion Hazards: Hazards and/or conditions that may cause fire or explosion are defined here.

## Material Safety Data Sheet

May be used to comply with  
 OSHA's Hazard Communication Standard,  
 29 CFR 1910.1200. Standard must be  
 consulted for specific requirements.

## U.S. Department of Labor

Occupational Safety and Health Administration  
 (Non-Mandatory Form)

Form Approved

OMB No. 1218-0072



IDENTITY (As listed on Label and List)

Magma-Fill Solidifier

Note: Blank spaces are not permitted. If any item is not applicable, or no  
 information is available, the space must be marked to indicate that.

## Section I

Manufacturer's Name

Molecular

Emergency Telephone Number

(516) 111-1000 or (516) 111-3100

Address (Number, Street, City, State, and ZIP Code)

100 Charles Ave

Telephone Number for Information

(516) 222-1000

Date

N-Y

Date Prepared

March 1, 1989

Signature of Preparer (optional)

## Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Tall oil fatty acid, reaction products	Not	Not	None	Not
with triethylenetetramine	Established	Established		Given
(CAS No. 68919-79-9)				

Bisphenol A epoxy resin, reaction products	Not	Not	None	Not
with diethylenetriamine	Established	Established		Given
(CAS No. 68585-27-3)				

All other ingredients in this product are considered non-hazardous.

**SAMPLE**

## Section III — Physical/Chemical Characteristics

Boiling Point °C	> 200	Specific Gravity (H <sub>2</sub> O = 1)	0.97
Vapor Pressure (mm Hg.)	Not Determined	Melting Point	Not Applicable
Vapor Density (AIR = 1)	Not Determined	Evaporation Rate (Butyl Acetate = 1)	Not Applicable

Solubility in Water

Slight

Appearance and Odor

Light amber liquid with characteristic amine odor.

## Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
233°F Setflash Closed Cup	Not Established	NE	NE

Extinguishing Media

Carbon dioxide, foam, dry chemical, water spray.

Special Fire Fighting Procedures

Fire fighters should use self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

Decomposition and combustion products may be toxic.

**Section V — Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	X	

**Incompatibility (Materials to Avoid)**

Epoxy resins, polyisocyanates, strong oxidizers and acids.

**Hazardous Decomposition or Byproducts**

Ammonia, oxides of nitrogen and carbon upon combustion.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	None

**Section VI — Health Hazard Data**

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	No	Yes	No

**Health Hazards (Acute and Chronic)**

If heated, vapors from product may cause headaches and nausea. Contact with eyes may cause corneal damage since product is corrosive and a severe irritant. Contact with skin may cause burns and damaged tissue, also dermatitis.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	None	None	None

**Signs and Symptoms of Exposure**

Skin may redden and even blister upon prolonged contact. Contact with skin and eyes will cause discomfort and irritation.

**Medical Conditions**

Generally Aggravated by Exposure Prolonged contact may lead to re-emergence of dermatitis.

**Emergency and First Aid Procedures**

Inhalation: Remove to fresh air. Skin: Wash thoroughly with soap and water. Eyes: Flush with water for at least 15 minutes. Ingestion: Do not induce vomiting. Seek physician immediately.

**Section VII — Precautions for Safe Handling and Use****Steps to Be Taken in Case Material is Released or Spilled**

Scrape up and absorb with inert material such as sand or sawdust.

**Waste Disposal Method**

Bury in approved landfill or incinerate under carefully controlled conditions. Observe federal, state and local regulations.

**Precautions to Be Taken in Handling and Storing**

Store in lidded containers between 41°F and 86°F.

**Other Precautions**

None

**Section VIII — Control Measures****Respiratory Protection (Specify Type)**

Organic chemical cartridge respirator if needed.

Ventilation	Local Exhaust	In open areas	Special	None
	Mechanical (General)	Recommended	Other	None

**Protective Gloves**

Impervious rubber/plastic

**Eye Protection**

Faceshield/goggles

**Other Protective Clothing or Equipment**

Protective aprons

**Work/Hygiene Practices**

Good industrial housekeeping. No eating or smoking.



**APPENDIX G**  
**HAZARD COMMUNICATION STANDARD TRAINING PLAN**

1. Employee training **WILL** include the following:

a. The DoD Federal Agency Hazard Communication Training Program. This program, which includes TVT 20-872 (Federal Hazard Communication Standards Training Program) and the trainer's guide, DoD 6050-5-G-1 (Federal Hazard Communication Training Program Trainer's Guide), will be used as the basic training source, with or without DoD 6050-W (Federal Hazard Communication Training Program Student's Workbook). Other TVTs and training materials may be used in addition to the DoD training program. This training will be provided by the ISO or through train-the-trainer methodology.

b. Hazardous Chemical Workplace Training. The supervisor will provide and should establish procedures to document training and education to employees as follows:

(1) An explanation of the types of operations and hazardous chemicals used in the employee's workplace.

(2) A description of the command/installation hazard communication program, the location and availability of the program, and how personnel can use and obtain chemical hazard information.

(3) Methods used by management to recognize and evaluate workplace chemical exposures.

(4) Location of chemical inventory, material safety data sheets, and the name and location of the program manager.

(5) An explanation of the physical and health hazards associated with potential exposure to workplace chemicals.

(6) Hazardous chemical properties including visual appearance, odor, and methods that can be used to detect the presence or release of hazardous chemicals.

(7) Protective measures including administrative and engineering controls, safe work practice guidelines, emergency procedures, and PPC&E.

(8) Hazardous chemical spill prevention and leak procedures, emergency procedures, and notification procedures.

(9) The meaning of workplace hazardous chemical warning labels, an explanation of the MSDS and SOPs to ensure that chemicals are handled, stored, and disposed of in accordance with specified SOPs and regulations.

(10) How to receive hazardous chemicals and how to interpret hazard information and countermeasures on an MSDS.

c. Hazardous Waste (HW) Training. The supervisor will provide and establish procedures to document training and education as follows:

(1) An explanation of the types of operations to which they are assigned that generate hazardous waste.

(2) A description of the procedures required by 40 CFR 264.16 (d)(3) to properly dispose of the hazardous generated to include storage, labeling, and manifest requirements.

(3) Training will be at least 40 hours and meet the requirements listed in 29 CFR 120.76.

(4) Supervisors of hazardous waste operators will receive, at the minimum, a 24-hour training program to meet the requirements listed in 29 CFR 120.76.

(5) A basic 8-hour training course will be provided to managers and persons who work around hazardous waste but are not responsible for the day-to-day activities of managing/ handling the hazardous waste and chemicals.

d. Hazardous Chemical/Waste Transportation. The supervisor will establish procedures to document training and certification of individuals required to transport hazardous chemicals/wastes.

2. If train-the-trainer methodology is used, the ISO and the environmental officer will annually train HCS/HW trainers. After training, trainers will conduct training in their respective organizations.

a. Training for the HCS will include TVT 20-827 and the trainer's guide (DoD 6050-5-G-1). Training will cover all the areas identified in paragraph 7 of this regulation. Student workbooks, if available, should be used. The TVT 20-827 can be obtained from Training and Audiovisual Support Centers.

b. Hazardous waste training will meet all of the requirements listed in 40 CFR 264.16 (d)(3) and 29 CFR 120.76.

c. Transportation of hazardous chemicals/wastes training will meet the requirements specified in 49 CFR 172.

3. If train-the-trainer methodology is not used, the ISO and environmental office will conduct this training for all employees as required by federal laws and for new employees. (Employees who are potentially exposed to or who work with hazardous chemicals will not work with these hazardous items until they have received the appropriate training).

4. The HCS training (for both military and civilian employees) will be documented on DD Form 1556 and incorporated as a permanent part of the official personnel folder. Block 18 of the form will have, along with the training objectives, the following

statement: "DO NOT DESTROY. RETAIN THIS RECORD FOR DURATION OF EMPLOYMENT/ENLISTMENT PLUS 30 YEARS." The supervisor should establish procedures to document workplace employee training to certify that they have received the training required by paragraph 7b(2) of this regulation.

5. Employees who have received training which meets the requirements of the HCS training program are not required to be retrained under this program. However, they will continue to receive training whenever they change workplaces or a new hazardous chemical is introduced into the workplace. Certified equivalent training will be documented with DD Form 1556 and approved by the ISO.

**GLOSSARY**  
**Definitions/Abbreviations**

AR	Army Regulation
CAS	Chemical Abstract Service is a registry that lists CERCLA hazardous substances
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended
CFR	Code of Federal Regulations
Chemical	any element or compound and any combination of the two
Container	any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. Pipes and piping systems, or engines, fuel tanks, or other operating systems in a vehicle are not considered to be containers
COR	Contracting Officer Representative
CPAC	Civilian Personnel Advisory Center
Distributor	business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers
DoD	Department of Defense
DOT	Department of Transportation
DPW	Department of Public Works
EHS	Extremely Hazardous Substance are substances listed in 40 CFR 335, Appendix A & B, and because of their extremely toxic properties, these chemicals were chosen to provide an initial focus for chemical emergency planning.
Employee	worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies; workers such as office workers who encounter hazardous chemicals only in non-routine, isolated instances are not included
EO	Executive Order
EPCRA	Emergency Planning and Community Right-to-Know Act (also known as SARA Title III) provides government and public with information about possible or potential chemical hazards in their communities and provides a framework for emergency planning

Exposure or Exposed	an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (i.e., accidental or possible) exposure; "subjected" in terms of health hazards includes any route of entry (i.e., inhalation, ingestion, skin contact or absorption)
FAR	Federal Acquisition Regulation
Hazard Communication Program	written document that describes how an employer or facility complies with all requirements of the Federal Hazard Communication Standard IAW 29 CFR 1910.1200
Hazard Communication Standard	federal law developed by OSHA to reduce illness and injury caused by chemical hazards in the workplace; requires evaluation of chemical hazards and communication of hazard information to both employers and employees
Hazard Warning	any words, pictures, symbols or combination thereof appearing on a label or other appropriate form of warning which conveys the hazards of the chemical in an area or on a container
Hazardous Chemical	any chemical which presents a health or physical danger
Hazardous Chemical List	list of all hazardous chemicals known to be present in a given workplace; identity/name of chemicals used on this list must match the identity/name used on the hazard warning labels and MSDSS
HAZWOPER	hazardous waste operator training is a course that provides topics including OSHA, RCRA, and SARA; storage of hazardous materials and wastes; waste minimization and pre-treatment, hazardous waste management planning; personal health and safety plans, personal protective equipment, emergency response planning, evacuation planning; MSDS management, waste manifesting; and record-keeping
HCS	hazard communication standard
Health Hazard	any chemical that can cause illness or injury when a person is exposed by ingestion, skin or eye contact, skin absorption, or inhalation
HMIS	Hazardous Management Information System
HW	hazardous waste - a solid waste, as defined in 40 CFR 261.2 that is not excluded from regulation as a hazardous waste under 261.4(b)
IAW	in accordance with

MDW Reg 385-1

Immediate Use	a hazardous chemical which is under the control of, or used only by, the employee who transfers it from a labeled container, and consists of the amount which will be used completely within a work shift or four hour period, whichever is less, in which it was transferred
Importer	the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States
Industrial Hygienist	expert in the recognition, evaluation, and control of safety and health hazards
ISO	installation safety office
Label	any written, printed or graphic material displayed or affixed to a container of hazardous chemicals
LERC	Local Emergency Planning Committee is a local emergency planning committee appointed by the emergency response commission (40 CFR 350.1) to develop local emergency response plans and review them at least annually
LR	limited release
Manufacturer	employer with a workplace where chemical(s) are produced for use or distribution
MDW	U.S. Army Military District of Washington
MSDS	material safety data sheet. Any written or printed material concerning a hazardous chemical that is prepared IAW 29 CFR 1910.1200; the MSDS gives the chemical's physical properties; describes known physical hazards, health hazards, and required controls; and identifies correct procedures for putting out a fire, cleaning up a spill or leak, disposing of waste, and handling/storing the chemical safely
NIIN	national item identification number
NSN	national stock number
OSHA	Occupational Safety and Health Administration or Act Federal agency within the Department of Labor that develops and enforces standards for workplace safety and health
Physical Hazard	any chemical that can cause fire, explosion, violent chemical reactions, or other similarly hazardous situations

PPC&E	personal protective clothing and equipment - equipment that protects the employee who wears it by placing a barrier between that employee and a hazard; includes protective eyewear, face shields and masks, gloves, boots, hats, clothing, and respirators
SASOHI	Standard Army Safety and Occupational Health Inspection
SERC	State Emergency Response Committee establishes emergency planning districts and appoints, supervises, and coordinates LERCs
SOP	standard operating procedure
TPQ	threshold planning quantity is the amount of a chemical (of substances listed in 40 CFR 355, Appendices A & B) that if exceeded must be reported to the SERC and LERC
Trade Name	the trademark or commercial name for a chemical
Trade Secret	any confidential formula, pattern, process, device, information, or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it
TRI	toxic release inventory is a report required under EO 12856 that focuses on the amount of toxic chemical that escaped or was transferred into the air, water, and land because of manufacturing, processing, or other use
Use	package, handle, react, emit, extract, generate as a byproduct or transfer
Warning Label	document affixed to chemical containers (or posted by stationary containers) that identifies the chemical material and all the appropriate hazard warnings
Work Area	room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present
Workplace	establishment, job site, or project, at one geographical location containing one or more work areas

## (MDW REGULATION 385-1)

MDW FM 35-R-E  
1 SEP 95



# HAZARDOUS CHEMICAL INVENTORY WORKSHEET

## INSTRUCTIONS

1. INSTRUCTIONS FOR USE. This form, MDW Form 35-R-E, or a computerized version will be used to provide the information required by 29 CFR 1910.1200 and paragraph 10 of MDW Regulation 385-1.
2. CATEGORY DEFINITIONS:

- a. Organization. Give the title of the work unit for which the inventory will cover.
- b. Date. Self explanatory.
- c. Supervisory. Person responsible for the hazardous chemicals in the workplace.
- d. Supervisor. Phone. Self explanatory.
- e. Tradename. Name of a hazardous chemical for which it is most easily identified. Information is contained on the label.
- f. Chemical Name. A specified chemical or major component in a mixture. Example: Acetic acid. Information is contained on label.
- g. Manufacturer. Self explanatory. Give phone number if available. Information is generally on the label.
- h. NSN. National Stock Number.
- i. CAS (Chemical Abstract Service) number.
- j. Quantity. Maximum quantity on hand at any one time. Example: 6-122 lb cans.
- k. Quantity on Hand. Define in gals, lbs, ozs, etc.
- l. Location. Give building number. If outside, indicate outside.
- m. Material Safety Data Sheet (MSDS) on hand. Yes or No.

REQUEST FOR DOD 6050.5 -LR DISTRIBUTION

Instructions:

Complete this form and submit through normal publication channels to Commander, U.S. Army Military District of Washington, Deputy Chief of Staff for Logistics, ATTN: ANLG-LS, Building 18, Fort McNair, Washington, DC 20319-5058. All entries are mandatory.

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Unit Type (Circle One) Active Army National Guard Army Reserve

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